**POSITION DESCRIPTION** (Please Read Instructions on the Reverse Side)

| | | | |
|---|---|---|---|
| 1. Agency Position No. | | | 2. Certification No. |
| 3. Collective Bargaining Unit (CBU) Code: XAA | 4. Employing Office Location: Washington, D.C. | 5. Duty Station: Consolidated Forensic Lab | 6. Competitive Level Code |
| 7. Reason for Submission: ☐ Re-description ☒ New ☐ Re-establishment ☐ Other. Explanation (show any positions replaced) | 8. Service: ☒ Department ☐ Field<br>11. Position is: ☐ Supervisory ☐ Managerial ☒ Neither<br>12. FLSA: ☒ Exempt ☐ Non-exempt | 9. Employment /Financial Statement Required: ☐ Yes ☒ No<br>13. Position Status: ☒ Career Service ☐ Legal Service ☐ Excepted Service ☐ Other ☐ Management Supervisory Service | 10. Subject to IA Action: ☒ Yes ☐ No<br>14. Agency Use *(optional)*: JC: 555093 |

| 15. Classified/Graded by | Official Title of Position | Pay Plan | Occupational Code | Grade | Initials | Date |
|---|---|---|---|---|---|---|
| a. Final Agency Authority or Designee | | | | | | |
| b. Agency or D.C. Department of Human Resources | Forensic Scientist (Materials Analyst) | CS | 401 | 11 | JMK | 3/3/14 |
| c. Intermediate Authority | | | | | | |
| d. Field Office | | | | | | |
| e. Recommended by Supervisor or Initiating Office | FS (Materials Analyst) | CS | | 11 | | |

16. Organizational Title of Position *(if different from official title)(optional)*

17. Name of Employee *(if vacant, specify)*

18. Department, Agency or Establishment: Department of Forensic Sciences

a. First Subdivision: Forensic Science Laboratory

b. Second Subdivision

c. Third Subdivision

d. Fourth Subdivision

e. Fifth Subdivision

19. Employee Review. Signature of Employee *(optional)* Date

20. Supervisory Certification. I certify that this is an accurate statement of the major duties and responsibilities of this position and its organizational structure. I further certify that this position is necessary to carry out the functions for which I am responsible. This certification is made with the knowledge and understanding that this information is to be used for statutory purposes relating to the appointment and payment of public funds, and that any false or misleading statements may constitute violations of such statutes or their implementing regulations.

a. Typed Name and Title of Immediate Supervisor

Signature Date

b. Typed Name and Title of Higher-Level Supervisor or Manager *(optional)*: Dr. Jason C. Kolowski, Director, FS Laboratory

Signature: Jason C. Kolowski Date: 2/26/14

21. Classification / Job Grading Certification. I certify that this position has been classified/graded as required by D.C. Official Code § 1-611.01 *et.seq.*, in accordance with official standards, or, if no official standards apply directly, consistently with the most applicable official standards.

Information for Employees. Official classification standards and information on employees are available in the D.C. Department of Human Resources. The classification of the position may be reviewed and corrected by the certifying authority or a designee of the Director of Human Resources. Information on classification/job grading appeals is available from the D.C. Department of Human Resources.

Typed Name and Title of Official Taking Action: Teresa M. Eubanks, HR Specialist

Signature: Teresa M. Eubanks Date: 3/3/14

22. Standards Used in Classifying/Grading Position: JFS for Professional Work in the Natural Resources Mgmt.& Biologist Sciences Group 400

| 23. Position Review | Initials | Date | Initials | Date | Initials | Date | Initials | Date | Initials | Date |
|---|---|---|---|---|---|---|---|---|---|---|
| a. Employee *(optional)* | | | | | | | | | | |
| b. Supervisor | | | | | | | | | | |
| c. Classifier | | | | | | | | | | |

24. Remarks *(optional)*

**PROMOTION POTENTIALTO CS-12**
**CAREER LADDER PROGRESSION IS CS-09/11/12/13**

25. Description of Major Duties and Responsibilities (see attachment)

**FORENSIC SCIENTIST (MATERIALS ANALYST)**
**CS-401-11**

## INTRODUCTION

This position is located in the Department of Forensic Sciences (DFS). The mission of the DFS is to provide high-quality, timely, accurate, and reliable forensic science services using best practices and best available technology, focusing on unbiased science and transparency, to enhance public safety and health.

The position is responsible for performing examinations of physical evidence submitted to the Materials Analysis Unit related to material and trace evidence analysis.

## MAJOR DUTIES

Identifies, analyzes, compares, and interprets evidence in criminal investigations. The types of crimes include person crimes, such as homicides, sexual assaults, and robberies, as well as property crimes. The types of analyses that might be encountered in the laboratory could include, but are not limited to the following:

- Fiber analysis
- Paint analysis
- Polymer analysis
- Adhesive analysis
- Glass analysis
- Comparative and analytical microscopy and microchemistry

Analyzes a range of evidence, utilizing a limited variety of methods; identifies, preserves, analyses, interprets, and presents conclusions from the comparison of evidence and known and documented reference data sets. Evaluates risks concerning or identifying hazards in the laboratory.

Researches and analyzes data to perform mathematical and statistical computations to complete scientific examinations.

Works with the team leader and supervisor and other scientists to ensure accreditation standards are met.

Examines simple Materials Analysis evidence, utilizing a variety of methods; identifies, preserves, analyses, interprets, and presents conclusions from the comparison of evidence with known and documented reference data sets.

May be required to provide advices on the collection of evidence in criminal cases, including those involving deaths, especially when homicide is suspected, and other violent crimes; evaluates risks concerning or identifying hazards in the laboratory.

Works collaboratively with investigators and members of the justice system to analyze and interpret evidence, and other information to develop information necessary to meet the objectives of the forensic investigation.
With guidance, effectively reports findings and conducts forensic examinations using validated tools and techniques.

Conducts a range of analyses; works effectively under pressure; may be required to provide technology advisory services to other agencies and department staff to enhance forensic investigations.

Operates, trouble shoots and performs minor repairs and preventive maintenance on equipment.

Identifies new methods or alternatives and/or to provides alternative methods for performing examinations or determines the effectiveness of current analytical methods.

Follows evidence control procedures to maintain chain-of-evidence integrity and ensures evidence is locked securely in a designated location before and after analysis. Develops examination plans to effectively and efficiently meet the scope of the questions at hand in the investigation addressing inculpatory and exculpatory evidence.

Exercises discretion and sound judgment to determine proper courses of action and assesses and evaluates a variety of situations, problems, conditions or questions.

Utilizes computer software to analyze results of tests in order to perform tests and keep up-to-date on current studies, pamphlets, journals, and books for use in devising new methods and tests. Devises charts, graphs, and tables as aids to conduct tests; evaluates laboratory test results in the area of concern; prepares technical reports on findings and project results.

Reviews higher graded examiners' data and reports to better understand the technical aspects, documentation and/or administrative protocols.

Prepares evidence for presentation in court; meets with attorneys, investigators or other law enforcement personnel regarding the interpretation of examinations conducted; testify as a key witness in court.

Testifies in court as a witness in connection to the evidence analyzed; studies new techniques and procedures in scientific analysis, collection, and processing; participates in a structured training program; demonstrates continuous effort to improve operations, decrease turnaround times, streamline work processes, and work cooperatively and jointly to provide quality seamless customer service.

Projects a professional image while representing the Department; and exemplifies the Department values, both on and off duty.

Performs other related duties as assigned.

## KNOWLEDGE REQUIRED BY THE POSITION

Advanced knowledge of and skill in applying a wide range of theories, principles, concepts, methodology and practices of analytical chemistry, physical science, or biology or related field to the work that is sufficient to perform mathematical and statistical that relates to analytical laboratory work; and knowledge of and ability to apply Federal, state, and local laws, codes and regulations pertaining to forensic science; apply evidence collection and preservation procedures.

Knowledge of quality assurance procedures and accreditation standards; proper procedures and standard laboratory rules and safety precautions regarding chemicals, toxins and biohazards and evidence collection and preservation procedures.

Advanced knowledge and hands-on experience with forensic investigations of systems and comprehensive knowledge of equipment and supplies used in a forensic laboratory including specialized scientific equipment, instrumentation and software; recent developments, current literature and sources of information related to the assigned forensic specialty and the ability to modify analytical methods, to solve problems or respond to complex technical issues on materials subject to analysis in the specialty area.

Ability to apply theoretical and analytical principles of natural and physical sciences, including organic, inorganic, biochemistry, physical chemistry, and other applicable fields; apply operational methods and techniques of the forensic laboratory, including laboratory testing procedures.

Thorough knowledge of evidence collection, preservation and chain of custody rules/laws and knowledge of safety practices, procedures as they apply to analyses in the laboratory; and knowledge of the rules of evidence and the methods used in presenting evidence in court, and policies and procedures for maintaining and handling evidence and the chain-of-evidence integrity.

Ability to work extensively with chemicals and biohazards in a safe manner; and perform a variety of scientific tests and analyses; recognize anomalies, formulate hypotheses, and take appropriate action; prepare and maintain accurate records/data and prepare clear and concise reports and memoranda.

Ability to testify effectively in court as a key witness in legal proceedings.

Ability to work safely without presenting a threat to self or others is essential.

## SUPERVISORY CONTROLS

Works under the Forensic Scientist Supervisor (Material Analysis Unit), who provides administrative direction on new and unusual techniques, desired results, required data to obtain, change in regulatory constraints, or methods and procedures that may apply to specific cases. Also, receives technical guidance and assistance from the Lead Forensic Scientist (Material Analyst). The incumbent independently plans and carries out individual assignments; and determines the validity of test methods and results and recommends acceptance or rejection of evidence items. Exercises independent responsibility and is held

accountable for actions and findings; and consults and keeps the leader and supervisor apprised of unusual technical problems, best practices and controversial issues.

The work is reviewed for conformance to guidelines, feasibility, soundness of overall approach and the effectiveness of meeting objectives, deadlines, and expected results and adherence to requirements.

**GUIDELINES**

Guidelines include policies and procedures of DFS, including but not limited to the standard operating procedures developed by the Materials Analysis Unit through the validation of analytical procedures; governing laws and regulations of the District and Federal government, Mayor's Orders, instructions, and the Deputy Mayor's policy and priorities. Incumbent exercises sound judgment in choosing, interpreting, or adapting available standards and guidelines to specific issues or subject. Many situations are not covered by the guidelines, and therefore, require interpretation and adaptation.

The guidelines are usually applicable, however, the incumbent may be required to seek guidance/direction when applying them to specific work situations/cases that may or may not be covered.

Judgment is exercised when interpreting, or adapting available standards and guidelines, as agency policies, regulations, precedents, and work directions for application. The incumbent is required to analyze results and recommends changes.

**COMPLEXITY**

The work often times requires many different and unrelated processes, procedures and methods that are well established; and seeks guidance in determining proper courses of action to assess and evaluate a variety of situations, problems, conditions or questions as well as applies personal knowledge in the application of the same.

Decisions regarding what is required include the assessment of unusual circumstances, variations in approach, and incomplete or conflicting data or unknown phenomena.

**SCOPE AND EFFECT**

Conducts scientific investigations and assists team members when required to perform analysis including collecting appropriate exhibits to prepare for examination/testing; and prepares documentation regarding findings and analysis that are instrumental in preparing results of tests; and identifying problems that may alter analytical results; and ensures that all documentation is in the appropriate order for court cases and/or final discovery.

The results of the work may affect other experts and/or the department's credibility, adequacy, accuracy and effectiveness of the field investigations, and laboratory tests; and ensures that data is relevant to the specific case. The results are also binding and affect judicial proceedings.

## PERSONAL CONTACTS

Contacts are with DFS officials, employees, laboratory personnel, consultants, Federal and District regulatory agencies, the general public, law enforcement, and investigators, and other stakeholders.

## PURPOSE OF CONTACTS

Contacts are for the purpose of influencing and motiving persons or groups in order to obtain the desired effect, such as gaining compliance with established policies and regulations by persuasion or exchanging and gathering information, ensuring the orderly flow of work as it pertains to maintaining the chain-of-custody of collected evidence, and storage, and to prepare detailed reports.

## PHYSICAL DEMANDS

Work is sedentary, however, some work requires periods of walking, standing, bending, stretching etc. Also, some work requires sufficient personal agility to collect and process evidence at a variety of crime scenes. Occasionally carry items weighing up to 50 pounds, such as bags and/or boxes of evidence, portable computers, peripherals, and other similar materials. Incumbent must possess sufficient manual dexterity to manipulate and operate laboratory equipment; must be able to visually distinguish color, shape, size, number and picture resolution quality; must be able to withstand exposure to disagreeable elements such as malodorous and/or decomposing samples/bodies, blood, bodily fluids, etc., that may pose a health risk.

## WORK ENVIRONMENT

The work is performed in an office and laboratory. The office setting is when preparing documentation, and the laboratory setting is during the testing and analysis phase.

The incumbent may be exposed to hazardous materials, toxic substances, blood borne pathogens, and electric current and electrostatic discharge and is required to follow safe laboratory practices and wear protective clothing, including wrist straps, facial masks, safety glasses, gloves, etc.

## OTHER SIGNIFICANT FACTS

Employees are fully tasked to this position only after demonstrating or gaining equivalent relevant experience. If selected for the position, the employee will be required to sign an obligated training service agreement upon entry on duty with the a range of duties in the Materials Analysis Unit including innovation through the development and implementation of new techniques and processes to meet anticipated and emerging challenges in materials evidence.

Required to successfully complete competency testing prior to beginning casework in a specialty discipline or sub-discipline; and successfully complete annual proficiency testing as required by accreditation standards.

May be required to attend training at an out-of-state facility for an extended period of time, up to six consecutive months within the year.

Bachelor's degree from an accredited college or university in science; or a higher degree and/or industry certification favorably considered.

**SPECIAL REQUIREMENTS**

This position's duty station will be housed within the Consolidated Forensic Laboratory (CFL) which is a protection-sensitive facility. As such, incumbents of this position shall be subject to criminal background checks, background investigations, and mandatory drug and alcohol testing, as applicable. Due to the handling of primary evidence, the applicant will be required to submit a buccal swab for the purposes of the DNA Quality Control database for the DFS.

The nature of the DFS mission necessarily involves the potential risks associated with biological or chemical hazards, including morgue functions. Although contact with these functions is intended to be minimal, the risks are nevertheless possible; training to recognize, address, and mitigate these risks is required as is dealing with potentially personally difficult topics, such as crime, death, and disease.